

# The LongPath

A North Alabama DX Club Publication

## Special points of interest:

- From the President
- January Program
- December Meeting Minutes
- 2017 Financials
- Barefoot Chronicles
- A New Radio for Christmas

## From the President

Happy New Year! I hope everyone enjoyed the holidays and got to spend some quality time with their family.

I have always been a big fan of the ARRL 10 Meter contest. This year with poor conditions it was really hard to make any headway. DX contacts were rare. I operated mixed this year since there was very little phone activity. A number of contacts were not completed due to rapid fading.

In January I look forward to the ARRL RTTY Roundup. I like this contest because you are limited to operating 24 out of 30 hours and it starts on Saturday. I also like RTTY contests better than phone or CW.

My strategy to give Santa specific part numbers and vendors for my Christmas list worked out well this year. I was so pleased with Bob, K8KI's QSL box I had to have one. I will put my DXCC Challenge cards in it. I have 52 years of QSLs to go through to find those cards. I also got a new pre-amp for my EME antenna.



It has a 24 dB gain with a .5dB noise figure. We measured it and it did better than the specification. I also got a Xonar U5 external sound card to use with my LP-PAN. The LP-PAN is a panadapter that hooks to the IF of my FTDX-5000. The stock panadapter is pretty useless. It is better than the Orion 2 panadapter, but that was totally useless. I was happy Mike, KF4BOG was surprised with a new computer and a DV4mini hot spot for D-Star, DMR, and Fusion. I sure hope everyone else got what they wanted for Christmas.



It is time to get your station ready for the Bouvet DXpedition. They are going to even have EME capability. Some DX entities only get activated every 10-20 years so you don't want to miss this one. Bob K4UEE has his hand in this one so I'm sure it will be good if propagation cooperates a little. When you get close to Honor Roll you will be very happy you made the effort to work this one. I am not nearly as disappointed later if I make a good attempt to

Cont'd on p. 2

## How to Join

- \* Come to a club meeting;
- \* or send in an application by mail (form on [www.NADXC.org](http://www.NADXC.org))
- \* or call Tom Duncan at (256)705-2147

## Peter I DXpedition Video—A Preview of Bouvet January Program

As we anxiously anticipate the mega-pileups which will form during the upcoming Bouvet 3Y0Z DXpedition, let's look back on the 3Y0X Peter I party in 2006. On a similar but slightly less remote ice-covered island near Antarctica, Peter I is a good analog to Bouvet. Some of the same players are going back for more wind-blown, icy adventure. It is always interesting to think about what those folks are going through when we are wrestling the rest of the world to get through so come out and enjoy the video so you can shiver along with them.

We will also be discussing the list of programs already selected and will solicit your ideas for programs you would like to hear and/or contribute.



## December 11, 2017 Meeting Minutes

By Kelley Johns, W4VPZ—NADXC Secretary/Treasurer

Christmas Dinner at Logan's Roadhouse Restaurant  
Members 25 & guests 14

### Review of Sign-in Sheet & DX worked

Kelley W4VPZ V47KS (#90 confirmed toward DXCC)  
Mark N4BCD HC8 in 3 bands in 4 calls  
Bruce AC4G ZA1WW (160m), BD4WN (160m), OJ9X (160m), VU2GSM (80m)  
Warren KJ4RAQ Galapagos  
Steve AG4W FR4 + 6W on 10m  
Tom N4KG UA0ZC 80m (8<sup>th</sup> band), 147k lookups on QRZ

### Announcements

Outgoing President, Mark N4BCD thanked the outgoing Vice President, John N5DF, and welcomed incoming President Steve AG4W, and Rob KB5EZ. Thanks were also given to the officers who are continuing to serve and to Tom KG4CUY for editing the LongPath newsletter.

The ARRL will be offering a 2018 International Grid Chase Award. There are over 32,000 grid squares in the world. The 2017 Programs were reviewed:

January Paul Nelson K4JAZ – SimSmith  
February Tom KG4CUY – Non-radio use of Mixers  
March John N5DF – Transmitter Intermodulation Distortion  
April Bob K8KI – Elegant Improvements in Ham Radio Design: 1960-1990  
May Stephen KK4TJP – Meager but Eager, a Case Study of DXing with Attic Antennas  
June Bruce AC4G – DXpedition to the Marshall Islands (V73CW), 1999-2002  
July M.D. WA4DXP – Speech Audio Processing and Tailoring  
August Roundtable Discussion of our involvement in the Huntsville Hamfest  
September Rob KB5EZ – WSPR Preliminary Results During the 2017 Eclipse

October M.D. WA4DXP – Bicycle Mobile DX'ing  
Rob KB5EZ – Meteor Scatter: the Physics and the Modes Used  
November Tom N4KG – Simple, but Effective, Low-Band Antennas

Mark N4BCD gifted M.D. WA4DXP with a parting treasure of a headphone to SO-239 adapter. The usefulness of the adapter was questioned.

Tom KG4CUY presented the North Alabama DX Club's DXer of the Year award to Mark N4BCD. Congratulations!

Omitted during the meeting:

### Treasurer's Report for November

Beginning Balance \$ 4,372.77  
Donation to Bouvet 3Y0Z \$ 125.00  
Ending Balance \$ 4,247.77

### Membership Applications

None.

## From the President

(cont'd from p. 1)

make a contact. As an example, back when Scarborough Reef was activated I only heard them once on 20 meters and they were weak. Neither my antenna or theirs was good enough to make it work then so that one is still on my list.

I was pleased the club donated to the Baker Howland DXpedition. K1B was the last active DXpedition in 2002. I made one contact with them and failed to get it confirmed shortly after the expedition. That was a big mistake on my part. In 2012 I tried to get it confirmed again. That proved to be very difficult because the responsibility for QSLing

had gone away. It was like a hot potato that had been tossed around the world and no one wanted to do it anymore. The lesson learned from this is don't wait 10 years to mine the log for the rare ones. Club Log was good to flag it for me along with several others. Getting a card confirmed from over a decade ago is another skill I learned the hard way.

The holidays were a good time to catch up on QSL cards. I will be addressing QSL forwarding to the ARRL Outgoing Service that I mentioned in last month's newsletter at this month's meeting.

I would also like to consider updating the Club Honor Roll Plaques that I just received after becoming President. They appear to not have been updated for at least 10 years. These would be nice to show at our hamfest booth.

I will be interested to see how many club members participate in the ARRL international Grid Chase. All your contacts will count so the ARRL RTTY Roundup is a great way to get started.

73  
Steve AG4W

## 2017 Year-End Financials

Kelley Vann Johns, W4VPZ-NADXC Secretary/Treasurer

### North Alabama DX Club 2017 Budget

Item	Description	Income	Expense	Bank Balance
1	Current Bank Account Balance 1/1/17			\$ 3,623.49
2	Dues receipts (est. 50 members @ \$15 each)	\$ 750.00		\$ 4,373.49
3	Repeater Power Bill (Janet Richardson)		\$ (80.00)	\$ 4,293.49
4	Repeater maintenance		\$ (100.00)	\$ 4,193.49
5	Annual Web Hosting & Domain Service		\$ (72.25)	\$ 4,121.24
6	DX Expedition Sponsorship		\$ (400.00)	\$ 3,721.24
7	Young Ham of the Year Plaque		\$ (46.86)	\$ 3,674.38
8	Annual DX Club Banquet Receipts (est.)	\$ 3,000.00		\$ 6,674.38
9	Annual DX Club Banquet Expenses - room & meal		\$ (2,300.00)	\$ 4,374.38
10	Hamfest Banquet Door Prizes		\$ (400.00)	\$ 3,974.38
11	DX Banquet Speaker Expenses		\$ (300.00)	\$ 3,674.38
12	Matching of member contributions to ARRL Spectrum Defense Fund		\$ (100.00)	\$ 3,574.38
13	Annual Club Picnic (\$75 shelter rental + \$10 picnic supplies)		\$ (85.00)	\$ 3,489.38
14	Plaque, Dxer of the year		\$ (46.86)	\$ 3,442.52
15	Quarterly Door Prize		\$ (100.00)	\$ 3,342.52
16	Incorporation*		\$ (200.00)	\$ 3,142.52
	Name Reservation with AL Secretary of State			
	Miscellaneous Income from Hamfest Committee			
	Miscellaneous Income -- Bouvet Donation			
	Miscellaneous Banner for Bouvet Dxpedition			
	Summary	\$ 3,750.00	\$ (4,230.97)	
	Net Difference in Bank Balance			\$ (480.97)
	*Donation 2/9/16 of \$200 to the club earmarked for incorporation expenses			

### Actuals

Income	Expense	Bank Balance
		\$ 3,709.29
\$ 553.24		\$ 4,262.53
	\$ (80.00)	\$ 4,182.53
	\$ -	\$ 4,182.53
	\$ (72.72)	\$ 4,109.81
	\$ (525.00)	\$ 3,584.81
	\$ -	\$ 3,584.81
\$ 3,364.02		\$ 6,948.83
	\$ (2,658.74)	\$ 4,290.09
	\$ (459.79)	\$ 3,830.30
	\$ (147.90)	\$ 3,682.40
	\$ (70.00)	\$ 3,612.40
	\$ -	\$ 3,612.40
	\$ (46.86)	\$ 3,565.54
	\$ -	\$ 3,565.54
	\$ -	\$ 3,565.54
	\$ (28.00)	\$ 3,537.54
\$ 200.00		\$ 3,737.54
\$ 23.97		\$ 3,761.51
	\$ (16.88)	\$ 3,744.63
\$ 4,141.23	\$ (4,105.89)	
		\$ (35.34)
dues collected this calendar year		
uncleared power bill payment		

## The Barefoot Chronicles

By Craig Behrens, NM4T

Happy New Year, NADXC'ers!

If you're like me, each New Year's celebration includes some retrospection and provides an opportunity to adjust priorities to accomplish those "intended" items that I/we just didn't quite get around to in the proceeding year.

For example—last year was a tough year for me and I didn't provide submissions for the *LongPath* as intended.

So, this year, with a little help from my NADXC friends — I've decided to write a monthly column for *The LongPath* that complements its current content.

My **Barefoot Chronicles** column will focus on radio operators who don't run a "full gallon." It's for those "Little Pistols" that chase DX and contest with modest stations running 100-watts and less.

I'll highlight portable operations (Op's) that club members participate in

that provide opportunities to become DX and/or to work some really juicy DX from portable Op. locations via a number of exciting and doable venues.

Many of these activities attract "Chasers" which provides opportunities for club members to hand out QSO's to their brothers and sister in the field. (I would, especially, think that such a diversification would be welcomes with propagation being as it is these days.)

You should also expect lots of comments about equipment, antennas and small construction projects to be interwoven into this column.

But the "bottom line" is: I will try capture and share ways we all have copious amounts of fun!

So, enough for introduction, let's get things started with a bang! Let's take a quick look at ICOM's brand new **IC-7610 Transceiver**.

### My First IC-7610 Impressions:

This story starts with me wrapping-up conversations with GigaParts (on another subject), I discovered that an evaluation unit from their first shipment of **IC-7610's** might be made available for special operating activities.

One thing led to another and I was loaned a brand new IC-7610 to gather first impressions from operating this paradigm-shifting radio "hands-on" and from operating via remote access using ICOM's **RS-BA1** software.

Books are already being written to discuss this "ground breaking" radio all it can do via customizing its software controlled parameters. However, I will only mention some of my "first Impressions" and comments in this column.

Right away, on power-up, users are delighted by the quality and resolution of the color display. (**Fig-1**) It is awe-

Cont'd on p. 4

some! (It's larger and brighter than on the IC-7300's display, which is very good.)



Fig.1: IC-7610 on First Power-Up

ICOM provides its traditional **"Dual Watch"** receive capability, but this rig has two, complete, separate and identical Receive/Transmitting stages. (Most traditional transceivers cut corners on the second receive channel.)

Scrolling through the 7610's display options is quick and easy. In addition, the spectrum display can show two channels or be "locked" together to double the width of a single spectrum segment.

And, should you want to capture a display image (**Fig-2**), you can simply do a **"Screen Dump"** to send an image file to an USB Memory Stick.

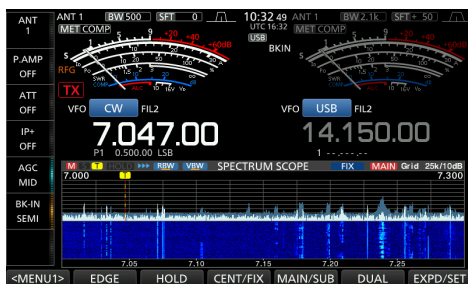


Fig.2: Spectrum Display Screen Dump Example

When you take a closer look at the hardware knobs, switches and display buttons – you realize that "This isn't Kansas City anymore, Toto!" Some serious learning curve is going to be required to master this rig.

Fortunately, ICOM has the baseline settings dialed-in and it's easy to make first QSO's without having to read the manual cover-to-cover. (You will get to spend some time with the manual before long, though.)

I have also realized that this transceiver can get you there. I believe that it is the best Software Defined Radio (SDR) implementation for this price point to date!

And, it will only get better as firmware upgrades are installed over the years.

Let's consider this: It appears that well-designed SDR radios have the potential to be more sensitive than conventional designs. For the 7610, you might be able to realize as much as a 3db improvement. This is because you don't have a lot of "stuff" in the signal path that can attenuate or degrade the source signal.

Now the **bad news**: If you live in an electrically noisy environment, this extra sensitivity could acerbate the quality of your reception.

But, now some more **good news**: The 7610 design approach provides the hardware and firmware tools required for dealing with this kind of thing.

The Noise Blanker and Digital Noise Reduction and adjustable dual band-pass IF filtering not only allow you to adjust a signal's shape, but they also allow you to adjust **the depth**.

In Yahoo's very active **IC-7610 User Group**, I'm seeing that users are investing a lot of effort regarding the audio processing functions. (Guys like Rob Sherwood–NCOB.)

Although you have a lot of control with the current firmware release, I expect some evolution here soon. You can already tweak your transmit and

receive audio quite a bit, but the community is still wrestling with how you get to "optimum."

This said, I had a fine QSO with Chris—**KE5YYC** in New Mexico. He critically examined the audio quality of my transmissions with me using ICOM's supplied **HM-219 MIC**. He said that it was terrific and he thought that the only improvement I might make would be to bump-up the treble a bit.

His comments (and those from others) indicate that the 7610's audio is of really high-quality and that the MIC is well-matched to this transceiver.

As you would expect from ICOM, this rig offers CW and audio message and recording memories, but it has added digital mode text messages to the fray and has considerably expanded the number of memories available.

In addition, the front of the 7610 provides two **USB ports** – I have an USB keyboard and mouse plugged into them for Keyboard CW and for Digital Mode operation.

External memory (virtual if you want) is available via SIM cards and/or USB memory sticks that plug into front panel slots.

One negative comment that I have is that the 7600 auto-tuner will only match up to 3.0-to-1 SWR's. Most transceivers that match up to 10.0-to-1. ICOM has a mode that cuts transmit power in half to extend this, but a better solution would be to use an external antenna tuner assembly.

Another improvement that should be considered – I predict that the **"Timer" switch** on the front (invaluable real estate) of the 7610 will be reassigned to another function that users will actually use.



### Using ICOM's RS-BA1 software:

Without going into the details, setting up the 7610 for remote operation is relatively straightforward. And, this rig has something really special – it has its own built-in networking capability for interfacing with your Internet Service Provider (ISP). A controlling computer is not required once everything is set-up.

Installing the RS-BA1 software (**Fig-3**) is straightforward. The Remote Utility is initialed first and then the Remote Control Program is invoked after Internet routing connections are established.

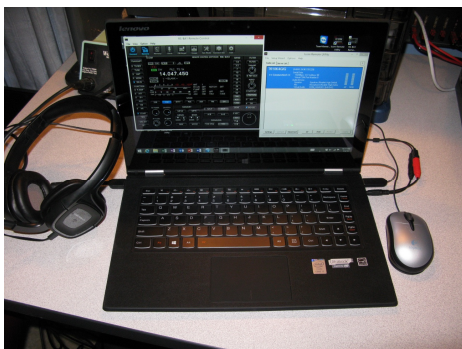


Fig.3: RS-BA1 Software Ready to Configure

However, the challenge for many of us becomes having an Internet service that can handle the communication bandwidth and Ping-rate requirements reliably. WOW is my cable Internet provider and it appears to work well. Those who have several people sharing their server and/or family members who are constantly streaming movies, etc. may make your set-up untenable. The 7610's access requirements must be assured to make this work well.

Running the RS-BA1 software from remote locations, on the other hand, is far less demanding communicating via the Internet than the 7610 set-up.

I dedicated a laptop computer (**Fig-4**) to support our remote operation experiments.



Fig.4: RS-BA1's Spectrum Display Window

The current revision of the RS-BA1 has some limitations. For example, it will only run one of the two receivers. But, it really works well and it even provides the remote user with a dynamic image of the 7610's Spectrum Display.

Once the 7600 is set-up with power, an antenna (or two) and a reliable Internet connection, Hams from most anywhere could operate your radio (when given the access information) via using the RS-BA1 software on their computer.

I decided to try it from my easy chair in our living room (**Fig-5**) via a wireless Internet connection.



Fig.5: Operating from My Recliner

Here, I had a nice chat with Charlie--**T12CDA** and broke a small pile-up to work Dick--**VO1RAC**.

Just think of the possibilities – definitely a Way Cool capability to have . . . Or have access to!

(Those interested in operating the IC-7610 direct and/or remote should contact me.)

So, that's it for this time around. Please email me with comments and questions. Better yet, let me know when you would like to take the IC-7610 for a spin remotely from your QTH.

Next month's column will focus on a DXpedition Go Bag approach and it will explore venues that can provide our club members with opportunities to be DX and/or to support NADXC'ers in their portable Op's.

72/73 & DX,

Craig—NM4T

[Craigb44@msn.com](mailto:Craigb44@msn.com)

### NADXC Officers and Directors

President	<b>Steve Werner, AG4W</b>
Vice President	<b>Rob Suggs, KB5EZ</b>
Secretary/	<b>Kelley Vann-Johns, W4VPZ</b>
Treasurer	
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### The LongPath Staff

#### Publisher/Editor:

Tom Duncan, KG4CUY

#### Departments:

Chuck Lewis, N4NM, DX Contests

Kelley Vann-Johns, W4VPZ, Minutes

Steve Werner, AG4W, From the President

Craig Behrens, NM4T, Barefoot Chronicles

## A New Radio for Christmas

By Mark Brown, N4BCD

Many readers have heard me utter the phrase “Life’s too short for QRP”, but truth be told I’ve also acknowledged there’s no “right way” to do amateur radio. So I’m turning off the amp for this article and going off in a new direction – sort of “where no man has gone before”. After reading this some might think I’ve gone there already.

Our office Christmas party at the home of Bob K8KI featured a game of dirty Santa. Each company-provided present was a \$50 gift card from various retail and dining establishments. Naturally there were a few occurrences of stealing a gift for a particular favorite. Home Depot & Lowes seemed to be particularly popular and with barn construction I could burn through one of those quickly – but buying lights & conduit isn’t much of a gift. I stole a Best Buy card.

Got online to see what \$50 could fetch from the big blue store. Amongst the scores of action figures from the latest popular movies and battery operated toys I found it: a life size replica of the original series Star Trek communicator. With Bluetooth so it can be paired to a cell phone to send and receive calls. It also does sound effects and messages from Spock, Bones, McCoy, Sulu, and Uhura.

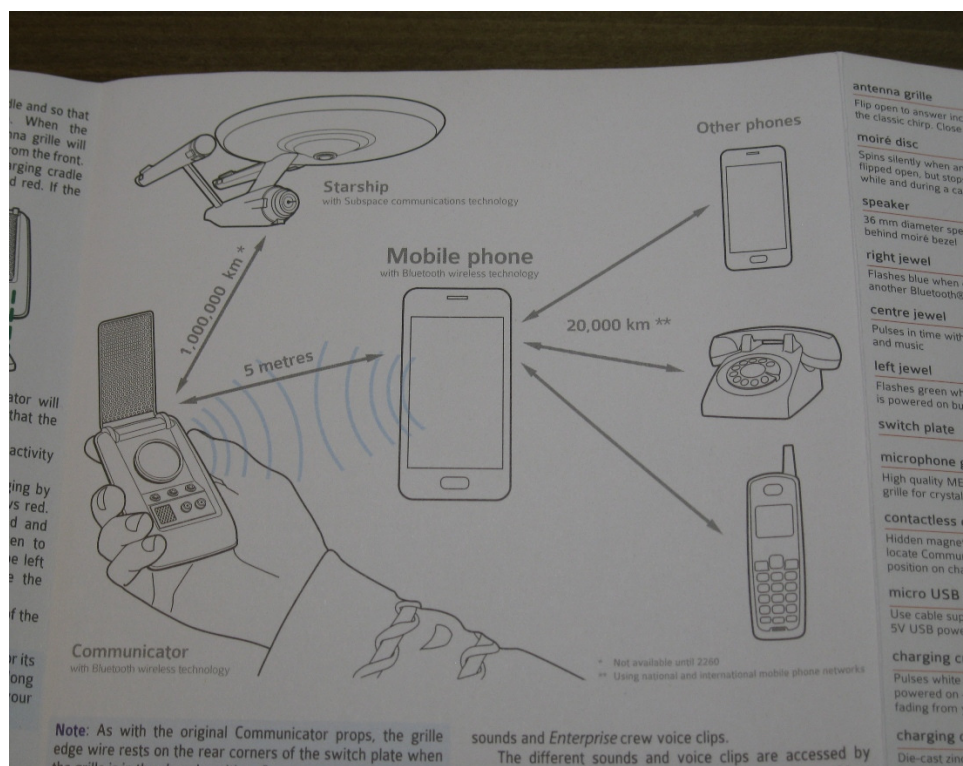


Only one problem: there aren’t many left and online ordering isn’t possible. The closest one is in a store NE of Chattanooga and even I’m not crazy enough to drive that far on December 23 to buy it.

As I sat at the computer and read the reviews on the product I was overcome, much like Ralphie’s obsession over a Red Ryder BB gun in A Christmas Story. My life would not be complete without this.

Amazon did not exist in Ralphie’s day but a search found a few other associated retailers who still had the communicator but at higher prices. As Spock would say “most illogical”, I entered my credit card number to complete the order and a few days later my “standard issue communicator” arrived.

With almost giddy excitement I assembled the engraved metal charger base, put some juice in the LiPo battery through the magnetic cradle, and easily paired it with my Android phone. The incoming call alert is just like the original series – two short beeps. Flipping open the communicator yields a few characteristic clicks and then you’re speaking with your caller. I would give this radio a 5 rating on eHam if there was a category for futuristic retro toys that actually work. I still have the Best Buy card, maybe I can find a phaser.



Excerpt from the manual. Note in the fine print the link path between the communicator and the starship is not available until the year 2260.

## December Treasurer's Report

By Kelley Vann Johns, W4VPZ – NADXC Secretary/Treasurer

Beginning Balance	\$ 4,247.77
Debits	
Web Site Hosting	-\$ 59.40
Banner for Bouvet to display	-\$ 16.88
Donation to Baker Island	-\$ 300.00
DXer of the Year Plaque	-\$ 46.86
Ending Balance	\$ 3,824.63